

## AMENDMENTS TO THE CLAIMS

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]].

1 (Currently amended). A data output system for rendering digital content, the data output system including:

an information apparatus, **included in the output system**, with access to at least part of the digital content over **a network that includes the Internet**, [[and]]

an output device, **included in the output system**, for rendering the digital content, the information apparatus being physically connected directly to the output device, the direct structural connection between the information apparatus and the output device not including a network, ~~the output system further comprising:~~

**an output controller for decoding and processing the digital content for rendering,**

a rendering engine, **included in the output device**, that outputs digital content in accordance with an output data acceptable to the output engine, [[; and]]

**a memory or storage component, included in the output system, for storing at least part of the digital content, and for storing** ~~that stores~~ at least part of one or more document objects as encapsulations or **references** ~~reference~~ corresponding specifically to the digital content,

~~the output system having,~~

means for providing from the output system to the one or more servers over the network that includes the Internet, a document object that includes at least part of a reference to the digital content or a pointer to the digital content, the document object being in accordance to an object or software component model suitable for sending to the one or more servers over the network that includes the Internet, and the providing of the document object from the output system to the one or more servers includes sending one or more messages that includes the document object from the output system to the one or more servers over the network that includes the Internet;

means for providing from the output system at least part of an output device object that includes a security or an authentication information to one or more servers over the network that includes the Internet, the security or the authentication information for enabling access of the digital content with the reference or the pointer to the digital content included in the document object;

~~means for providing from the output system a document object that includes at least part of the digital content, a reference to the digital content, or a pointer to the digital content, individually or in any combination, to one or more servers over the network that includes the Internet, and~~

means for receiving the digital content from the one or more servers over the network that includes the Internet, at the output system, for rendering in response to providing from the output system the document object to the one or more servers over the network that includes the Internet, and the receiving of the digital content being after the sending of the output device object that includes the security or the

authentication information from the output system to the one or more servers over the network that includes the Internet, the digital content corresponding to the document object sent from the output system over the network that includes the Internet[[,]];

means for generating, at the output controller, an output data for rendering, the generating of the output data includes a decoding operation and a digital imaging operation on the digital content for rendering; and

means for delivering [[an]] the output data related to the digital content from the output controller to the output engine for rendering of the digital content by the output engine.

2 (Currently amended). The output system of claim 1 further comprising means for storing at the memory storage included in the output system the one or more output device objects that include the security or authentication information.

3 (Previously presented). The output system of claim 1 further including a wireless communication unit for wireless communication, and the output system further comprising means for opening a wireless communication channel with the wireless communication unit for accessing the one or more servers via the wireless communication channel and over the network that includes the Internet.

4 (Previously presented). The output system of claim 1 in which the output device includes an audio output device.

5 (Currently amended). The output system of claim 1 further comprising providing from the output system to the one or more servers one or more of ~~an authentication information~~, a quality of service information, a priority information, and a subscription service information, individually or in any combination thereof.

6 (Previously presented). The output system of claim 1 further comprising means for providing the at least part of the output device object to the one or more servers as unsolicited information without a request therefor from the one or more servers.

7 (Previously presented). The output system of claim 1 further comprising means for sending from the output system a composite message, that includes at least one object, to the one or more servers over the Internet.

8 (Previously presented). The output system of claim 1 further comprising means for sending from the output system payment or subscription information to one or more servers over the Internet.

9 (Previously presented). The output system of claim 1 further comprising means for implementing at the output system job management functionalities with one or more of data output job queuing for rendering one or more digital content received by the output system.

10 (Previously presented). The output system of claim 1 further comprising means for providing a user interface for receiving user-implemented modifications of the output system.

11 (Previously presented). The output system of claim 1 further comprising means for implementing at the output system a security procedure that limits access to the rendering of the digital content at the output system.

12 (Previously presented). The output system of claim 11 in which the security procedure includes storing in a memory component an access control list specifying information related to an information apparatus or a user, individually or in any combination.

13 (Previously presented). The output system of claim 11 in which the security procedure includes one or more of a subscription indicator, a login, a password, and an authentication, individually or in any combination.

14 (Previously presented). The output system of claim 1 further comprising an output controller with means for communicating with the information apparatus.

15 (Previously presented). The output system of claim 1 further comprising an output controller that is externally connected to the output device.

16 (Previously presented). The output system of claim 1 further comprising an output controller, the output controller further including means for converting the digital content into a form acceptable to a printer controller.

17 (Previously presented). The output system of claim 1 further comprising an output controller, the output controller further including means for converting the digital content into a form compatible with an output engine.

18 (Previously presented). The output system of claim 1 in which the output data received by the output engine includes device dependent data acceptable to the output engine.

19 (Previously presented). The output system of claim 1 in which the output device includes a television.

20 (Previously presented). The output system of claim 1 in which the output device includes one of a display device or a projection device.

21 (Previously presented). The output system of claim 1 in which the output device further includes means for performing at least partial raster image processing operations on the output data.

22 (Previously presented). The output system of claim 21 in which the image processing operation includes one or more of an interpretation operation, a conversion operation, a rasterization operation, a scaling operation, a segmentation operation, color space transform operation, an image enhancement operation, a color correction operation, a halftoning operation, a compression operation, and an encryption operation, individually or in any combination.

23 (Previously presented). The output system of claim 1 in which the output device includes a printer.

24 (Previously presented). The output system of claim 1 further including an interface with a touch sensitive display screen for interacting with a user.

25 (Previously presented). The output system of claim 1 in which the output medium is one or more of a substrate, a paper, a display screen, and a projection, individually or in any combination.

26 (Currently amended). [[In an]] An output system for rendering digital content, the output system including,

~~an information apparatus with access to at least part of the digital content,~~

an output device for rendering the digital content, the information apparatus being physically connected directly to the output device, the direct structural connection between the information apparatus and the output device not including a network,

a rendering engine that outputs the digital content on a medium in accordance with an output data received at the output engine, [[and]]

a memory storage that stores data for rendering[:],  
the improvement in the output system comprising:

[[the]] an information apparatus included in the output system with access to at least part of the digital content over a network that includes the Internet, the information apparatus having,

means for providing, over the information apparatus, from the output system a document object that includes at least ~~part of the digital content~~, a reference to the digital content[[,:]] or a pointer to the digital content, ~~individually or in any combination~~, to one or more servers over the network that includes the Internet, the document object being in accordance to an object or software component model suitable for including in one or more messages for sending to the one or more servers over the network that includes the Internet.

means for providing, over the information apparatus, from the output system, a payment or a subscription information to the one or more servers over the network that includes the Internet, the payment or the subscription information being related to accessing digital content,[[and]]

means for receiving, over the information apparatus, the digital content from the network at the output system in response to sending the document object from the output system to the one or more servers over the network that includes the Internet, the digital content corresponding to the said document



object sent from the output system, and the receiving of the digital content being related to the payment and subscription information send from the output system; and

an output controller included in the output system having,

means for receiving, at the output controller, the digital content from the information apparatus,

means for queuing or spooling the digital content at the output controller for rendering,

means for generating, at the output controller, [[the]] an output data corresponding to the digital content for passing the output data to the output engine included in the output system, the generating of the output data including a decoding operation or a decompression operation on the digital content, and

means for passing the output data from the output controller to the output engine for rendering.

27 (Currently amended). The output system of claim 26 in which ~~the output data received at the output device system is from a network~~ the output controller further has means to store at least part of an output device object having one or more attributes relating to the output device or the output system.

28 (Previously presented). The output system of claim 26 further including an interface with a touch sensitive screen for interacting with a user.

29 (Previously presented). The output system of claim 26 in which the output data includes device dependent data in relation to the output device.

30 (Previously presented). The output system of claim 26 in which the output medium is one or more of a substrate, a paper, a display screen, and a projection, individually or in any combination.

31 (Previously presented). The output system of claim 26 further comprising means for providing from the output system at least part of an output device object that includes a security information to one or more servers over the network that includes the Internet.

32 (Previously presented). The output system of claim 26 further including a wireless communication unit for wireless communication, and the output system further comprising means for opening a wireless communication channel with the wireless communication unit for accessing the one or more servers over the wireless communication channel to the network that includes the Internet.

33 (Previously presented). The output system of claim 26 in which the output device includes a printer.

34 (Currently amended). The output system of claim 26 further comprising means for sending from the output system ~~payment or subscription information~~ **a job object that includes a status or a confirmation information** to the one or more servers over the network that includes the Internet.

35 (Currently amended). The output system of claim 26 ~~in which the output system further includes means for implementing job management functionalities with one or more of data output job queuing for rendering one or more digital content received by the output system~~ **further comprising means for posting or broadcasting at the output device or the output system its availability or service over a wired or wireless network so that the output device or output system can be discovered by a device distinct from the output device or the output system.**

36 (Previously presented). The output system of claim 26 in which the output controller further includes means for providing a user interface for receiving user-implemented modifications of the controller.

37 (Previously presented). The output system of claim 26 in which the output controller further includes means for implementing a security procedure that limits access to the rendering provided by the output device.

38 (Previously presented). The output system of claim 26 in which the output controller is included in the output device.

39 (Previously presented). The output system of claim 26 in which the output controller is separate from the output device.

40 (Previously presented). The output system of claim 26 in which the output controller further includes means for converting the digital content into a form compatible with the output engine.

41 (Previously presented). The output system of claim 26 in which the output controller further includes means for performing at least partially, raster image processing operations on the output data.

42 (Currently amended). [[In an]] **An** output system for rendering digital content, the output system including,

an information apparatus, **in the output system**, with access to **a network that includes the Internet** ~~at least part of the digital content,~~

~~an interface with a touch sensitive display screen for interacting with a user,~~

an output device for rendering the digital content, the information apparatus being physically connected directly to the output device, the direct structural connection between the information apparatus and the output device not including a network, ~~the data output system further including,~~

a rendering engine that outputs on a medium in accordance with an output data received at the output engine,

an output controller with one or more software applications installed or installable at the output controller for processing the digital content for rendering,

a wireless communication unit for wireless communication, [[and]]

a memory storage that stores data for rendering;

the improvement in the output system comprising:

means for opening, at the output system, a wireless communication channel with the wireless communication unit, the wireless communication channel for enabling the output system wireless access to one or more other wireless devices distinct from the output system;

means for providing, from the output system to the one or more servers over the network that includes the Internet, at least an identification information associated with the output device or output system;

means for providing, over the information apparatus, from the output system a document object that includes at least ~~part of the digital content~~, a reference to the digital content, or a pointer to the digital content, ~~individually or in any combination~~, to the one or more servers via the wireless communication channel and over a network that includes the Internet, the document object being in accordance to an object or software component model suitable for sending as one or more messages that includes the document object to the network that includes the Internet;

means for receiving at the output system at least part of the digital content from the one or more servers over the network that includes the Internet ~~via the wireless communication channel~~ in response to providing from the output system the document

object to the one or more servers over the network that includes the Internet, the digital content being related to the document object sent from the output system over the network that include the Internet, and the receiving of at least part of the digital content having a relationship to the identification information, associated with the output device or the output system, sent from the output system to the one or more servers;

means for processing, at the output controller, with the one or more software application, the digital content into an output data suitable for rendering by the output engine; and

means for rendering the received digital content by the output engine at the output system.